

1. (Twice Amended) A computer implemented method of synchronizing at least a first and a second database, wherein the manner of storing a set of recurring date bearing instances differs between the first and second databases, and at least the first database uses a recurring record to store the set of recurring date bearing instances, the method comprising:

b1. processing a plurality of non-recurring records in the second database to [generate a synthetic recurring record representing a] identify a set of non-recurring records storing a set of recurring date bearing instances in the second database;

performing a comparison of the set of non-recurring records of the first database [synthetic recurring record of the second database] to a recurring record of the first database; and

completing synchronization based on the outcome of the comparison.

12~~7~~. (Twice Amended) The method of claim [1] ~~57~~<sup>11</sup> wherein, following the step of completing synchronization, one of the synthetic recurring record and recurring record is fanned back into a plurality of fanned non-recurring records.

b2 cont. 3~~4~~. (Twice Amended) The method of claim 1 [wherein] further comprising, after completing synchronization, storing the set of recurring date bearing instances [is stored] in the second database as a plurality of non-recurring records.

<sup>4</sup> 5. (Twice Amended) The method of claim 1 [wherein]  
further comprising, after completing synchronization, storing the  
set of recurring date bearing instances [is stored] in the second  
database as a recurring record having a different record  
structure than the recurring record of the first database.

<sup>5</sup> 6. (Twice Amended) The method of claim 1 further  
comprising storing a history file containing a record  
representative of one of the recurring record and [synthetic  
recurring record] the set of non-recurring instances in a past  
synchronization.

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cont.  
247. (Twice Amended) A computer program, resident on a  
computer readable medium, for synchronizing at least a first and  
a second database, wherein the manner of storing a set of  
recurring date bearing instances differs between the first and  
second databases, and at least the first database uses a  
recurring record to store the set of recurring date bearing  
instances, comprising instructions for:

processing a plurality of non-recurring records in the  
second database to [generate a synthetic recurring record  
representing a] identify a set of non-recurring records storing  
the set of recurring date bearing instances in the second  
database;

performing a comparison of the set of non-recurring records of the first database [synthetic recurring record of the second database] to a recurring record of the first database; and completing synchronization based on the outcome of the comparison.

35 <sup>34</sup> ~~30~~. (Twice Amended) The computer program of claim [7] wherein, following the instruction for completing synchronization, one of the synthetic recurring record and recurring record is fanned back into a plurality of fanned non-recurring records.

26 <sup>24</sup> ~~10~~. (Twice Amended) The computer program of claim <sup>24</sup> ~~7~~ [wherein] further comprising instructions for, after completing synchronization, storing the set of recurring date bearing instances [is stored] in the second database as a plurality of non-recurring records.

27 <sup>24</sup> ~~11~~. (Twice Amended) The computer program of claim <sup>24</sup> ~~7~~ [wherein] further comprising instructions for, after completing synchronization, storing the set of recurring date bearing instances [is stored] in the second database as a recurring record having a different record structure than the recurring record of the first database.

*B3*  
*could.*  
28~~12~~<sup>24</sup>. (Twice Amended) The computer program of claim ~~7~~<sup>7</sup> further comprising instructions for storing a history file containing a record representative of one of the recurring record and [synthetic recurring record] the set of non-recurring instances in a past synchronization.

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*B4*  
13~~13~~<sup>11</sup>. (Once Amended) The method of claim [1] ~~51~~<sup>11</sup> wherein the synthetic recurring record has a list of excluded instances and the step of processing a plurality of non-recurring records in the second database to generate a synthetic recurring record further comprises generating a list of excluded instances representative of instances previously represented by the recurring record and currently represented by another record or deleted.

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14~~14~~<sup>11</sup>. (Once Amended) The method of claim [1] ~~51~~<sup>11</sup> wherein the recurring record and the synthetic recurring record each contain a list of excluded date bearing instances, wherein the step of performing a comparison of the synthetic recurring record to the recurring record includes performing a comparison of the list of excluded date bearing instances of the recurring record with the list of excluded date bearing instances of the synthetic recurring record.

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<sup>18</sup>  
19 ~~18~~. (Once Amended) The method of claim [6] ~~58~~ wherein  
the second database assigns a unique ID to each record, and  
wherein the method further comprises:

fanning one of the synthetic recurring record and the  
recurring record into a plurality of fanned non-recurring  
records;

storing records in the history file representative of  
the plurality of fanned non-recurring records;

storing in the history file the unique IDs assigned by  
the second database to the plurality of fanned non-recurring  
records; and

recording linkages among the records representative of  
the plurality of non-recurring records and the record  
representative of one of the recurring record and synthetic  
recurring record.

<sup>18</sup>  
<sup>20</sup>  
~~19~~. (Once Amended) The method of claim [6] ~~58~~ wherein  
the second database assigns unique IDs to each record, the  
history file further contains records representative of non-  
recurring records of the second database from a past  
synchronization and unique IDs assigned to the non-recurring  
records of the second database, and the step of processing a  
plurality of non-recurring records in the second database to  
generate a synthetic recurring record further comprises:

performing a comparison of the unique IDs stored in the history file with unique IDs of the plurality of non-recurring records in the second database; and

*B5 could.*  
selecting a set of non-recurring records in the second database based on the comparison of the unique IDs and generating the synthetic recurring record using the set of non-recurring records.

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*6* ~~2~~<sup>5</sup>. (Once Amended) The method of claim ~~6~~<sup>5</sup> further comprises performing a second comparison of one of the synthetic recurring record and the recurring record to the record representative of the recurring record or the [synthetic recurring record in a past synchronization,] set of non-recurring instances and completing synchronization based on the outcome of the second comparison.

*B6*  
*7* ~~2~~<sup>7</sup>. (Once Amended) The method of claim 1 wherein each recurring record and each non-recurring record includes a key field, and wherein the step of processing a plurality of non-recurring records in the second database [to generate the synthetic recurring record] further comprises:

performing a second comparison of the key fields of the recurring and non-recurring records; and

selecting a group of records from among the recurring and non-recurring records based on the outcome of the comparison.

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9 ~~25~~<sup>7</sup>. (Once Amended) The method of claim ~~23~~<sup>7</sup> wherein each recurring record and each non-recurring record includes at least one other field, and wherein the step of processing a plurality of non-recurring records in the second database [to generate a synthetic recurring record] further comprises:

B1 performing a third comparison of the at least one other field of the non-recurring records in the group;

selecting a set of non-recurring records based on the outcome of the third comparison; and

[generating the synthetic recurring record using]  
correlating the set of non-recurring records to the recurring record of the first database.

47 ~~21~~. (Once Amended) A computer implemented method of synchronizing at least a first and a second database, wherein [each record] records in the first and second databases [includes] include a key field, the method comprising:

B2 performing a first comparison of the content of the key field of the records of the first database with the content of the key field of the records of the second database;

cont. selecting a plurality of groups of records of the first and second databases based on the outcome of the first comparison;

performing a second comparison of the records in one of the plurality of groups of records to determine a correspondence between a record of the first database in the one of the

plurality of groups and a record of the second database in the one of the plurality of groups;

performing a third comparison of the records in the determined correspondence; and

completing the synchronization based on the outcome of the [second] third comparison.

<sup>47</sup>  
49 31. (Once Amended) The method of claim [29] <sup>21</sup>  
further comprising storing a history file containing history records representative of records of the first and second databases in a past synchronization, [and] wherein [a corresponding item group further comprises a history record] performing a second comparison includes performing a comparison of the records in the one of the plurality of groups to the history records and wherein performing the third comparison includes comparing a corresponding history record with the records in the determined correspondence.

<sup>34</sup>  
36 35. (Once Amended) The computer program of claim [7] <sup>60</sup>  
wherein the synthetic recurring record has a list of excluded instances and the instruction for processing a plurality of non-recurring records in the second database to generate a synthetic recurring record further comprises instructions for generating a list of excluded instances representative of instances previously represented by the recurring record and currently represented by another record or deleted.



*37*  
[7] <sup>34</sup>~~60~~ <sub>36</sub>. (Once Amended) The computer program of claim  
wherein the recurring record and the synthetic recurring  
record each contain a list of excluded date bearing instances,  
wherein the instruction for performing a comparison of the  
synthetic recurring record to the recurring record includes  
instructions for performing a comparison of the list of excluded  
date bearing instances of the recurring record with the list of  
excluded date bearing instances of the synthetic recurring  
record.

*41*  
42 ~~40~~. (Once Amended) The computer program of claim [12]  
~~61~~ wherein the second database assigns a unique ID to each  
record, and wherein the computer program comprises:

fanning one of the synthetic recurring record and the  
recurring record into a plurality of fanned non-recurring  
records;

storing records in the history file representative of  
the plurality of fanned non-recurring records;

storing in the history file the unique IDs assigned by  
the second database to the plurality of fanned non-recurring  
records; and

recording linkages among the records representative of  
the plurality of non-recurring records and the record  
representative of one of the recurring record and synthetic  
recurring record.

41/ 43 ~~41~~. (Once Amended) The computer program of claim [12] ~~61~~ wherein the second database assigns unique IDs to each record, the history file further contains records representative of non-recurring records of the second database from a past synchronization and unique IDs assigned to the non-recurring records of the second database, and the instruction for processing a plurality of non-recurring records in the second database to generate a synthetic recurring record further comprises instructions for :

performing a comparison of the unique IDs stored in the history file with unique IDs of the plurality of non-recurring records in the second database; and

selecting a set of non-recurring records in the second database based on the comparison of the unique IDs and generating the synthetic recurring record using the set of non-recurring records.

29 44. (Once Amended) The computer program of claim <sup>28</sup>/~~12~~ further comprises instructions for performing a second comparison of one of the synthetic recurring record and the recurring record to the record representative of the recurring record or [synthetic recurring record in a past synchronization,] the set of non-recurring instances and completing synchronization based on the outcome of the second comparison.

30<sup>24</sup> 45. (Once Amended) The computer program of claim 7 wherein each recurring record and each non-recurring record includes a key field, and wherein the instruction for processing a plurality of non-recurring records in the second database [to generate the synthetic recurring record] further comprises instructions for:

performing a second comparison of the key fields of the recurring and non-recurring records; and

selecting a group of records from among the recurring and non-recurring records based on the outcome of the comparison.

32<sup>B12</sup> 47. (Once Amended) The computer program of claim 45<sup>30</sup> wherein each recurring record and each non-recurring record includes at least one other field, and wherein the instruction for processing a plurality of non-recurring records in the second database [to generate a synthetic recurring record] further comprises instruction for:

performing a third comparison of the at least one other field of the non-recurring records in the group;

selecting a set of non-recurring records based on the outcome of the third comparison; and

[generating the synthetic recurring record using]  
correlating the set of non-recurring records to the recurring record of the first database.

53 ~~49~~. (Once Amended) A computer program, resident on a computer readable medium, for synchronizing at least a first and a second database, wherein [each record] records in the first and second databases [includes] include a key field, comprising instructions for:

performing a first comparison of the content of the key field of the records of the first database with the content of the key field of the records of the second database;

B14 selecting a plurality of groups of records of the first and second databases based on the outcome of the first comparison;

performing a second comparison of the records in one of the plurality of groups of records to determine a correspondence between a record of the first database in the one of the plurality of groups and a record of the second database in the one of the plurality of groups;

performing a third comparison of the records in the determined correspondence; and

completing the synchronization based on the outcome of the [second] third comparison.

53 ~~55~~ ~~49~~. (Once Amended) The computer program of claim [51] further comprising instructions for storing a history file containing history records representative of records of the first and second databases in a past synchronization, [and] wherein [a corresponding item group further comprises a history record]

B15 cont.

*B15  
Cont.*

performing a second comparison includes performing a comparison  
of the records in the one of the plurality of groups to the  
history records and wherein performing the third comparison  
includes comparing a corresponding history record with the  
records in the determined correspondence.

[ Add the following claims:

*B16  
Cont.*

<sup>11</sup>--~~51~~. The method of claim 1 wherein processing the plurality of non-recurring records further includes processing the plurality of non-recurring records to generate a synthetic recurring record representing the set of recurring date bearing instances in the second database, and

wherein performing a comparison of the set of non-recurring records to a recurring record includes performing a comparison of the synthetic recurring record of the second database to the recurring record of the first database.--

<sup>18</sup>--~~58~~. The method of claim <sup>11</sup>~~51~~ further comprising storing a history file containing a record representative of one of the recurring record and synthetic recurring record in a past synchronization.--

<sup>23</sup>--~~58~~. The method of claim <sup>18</sup>~~58~~ further comprises performing a second comparison of one of the synthetic recurring record and the recurring record to the history file record

representative of the recurring record or the synthetic recurring record in the past synchronization, and completing synchronization based on the outcome of the second comparison.--

*34*  
--~~60~~. The computer program of claim *24* wherein processing the plurality of non-recurring records further includes processing the plurality of non-recurring records to generate a synthetic recurring record representing the set of recurring date bearing instances in the second database, and wherein performing a comparison of the set of non-recurring records to a recurring record includes performing a comparison of the synthetic recurring record of the second database to the recurring record of the first database.--

*B16*  
*cond.*

*41*  
--~~61~~. The computer program of claim *34* further comprising instructions for storing a history file containing a record representative of one of the recurring record and synthetic recurring record in a past synchronization.--

*46*  
--~~62~~. The computer program of claim *41* further comprises performing a second comparison of one of the synthetic recurring record and the recurring record to the history file record representative of the recurring record or the synthetic recurring record in the past synchronization, and completing synchronization based on the outcome of the second comparison.--